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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------|---------------------|------------------|
| 09/460,197 | 12/13/1999 | JOHN SPENCER CUNNINGHAM | A65-25311 | 2142 |

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EXAMINER

NGUYEN, KEVIN M

ART UNIT PAPER NUMBER

2674

DATE MAILED: 05/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/460,197

Applicant(s)

CUNNINGHAM ET AL.

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-36,38-46 and 48-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-36,38-46 and 48-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 03 September 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on 3/19/2003 is entered. The rejections of claims 33-36, 38-46, 48-52 are maintained.

Drawings

2. The corrected or substitute drawings were received on 9/3/2002. These drawings are approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 38-42 and 48-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grothe et al (US 4,635,050) in view of Stoddard et al (US 3,665,454).**

As to claims 38 and 48, Grothe et al teach a computer device associate a method for driving a hybrid stroke/raster display using formats designed for raster4 displays, a device comprising a raster symbol generator 60, a stroke vector generator 50, CRT display interface 90 and CRT display 10 (figure 3, col. 7, lines 22-36). Computer interface (not shown) applies digital instruction signal to address bus 61 and data bus 62 in accordance with the masking display presentation to be generated on the

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display face 10 of CRT 80. Video data output in digital form from the generator 60 is provided on bus 63 to memory 30 and CRT 80 (col. 6, lines 22-27). A bit is fetched from memory 30 with identifies by it state 0 or 1 (generated code, col. 8, lines 6-8). Raster video 63 and stroke video 52 corresponds to graphics library (figure 3).

Grothe et al fail to teach a single display routine. However, Stoddard et al teach a single display generator unit (16) (a single display routine, column 1, lines 64-66) driving stroke (writing rates) and raster scan displays, as driving CRT type indicators, the invention is also applicable to any types indicator (column 10, lines 44-51). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the single display routine taught by Stoddard et al in Grothe et al's display device because this would save space, room, and light weight for the applicable display device.

As to claims 39 and 49, Grothe et al teach raster video 63 and stroke video 52 corresponds to graphics library (figure 3).

As to claims 40 and 50, Grothe et al teach stroke vector generator 50, CRT display interface 90 and memory 30 (figure 3).

As to claims 41 and 51, Grothe et al teach the mode control signal on line 46 is switched to a state such that multiplexer 70 accept the input from stroke vector generator 50 on bus 51 (col. 7, lines 60-62).

As to claims 42 and 52, Grothe et al teach a bit being fetched from memory 30 with identifies by it state 0 or 1 (col. 8, lines 6-8).

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5. Claims 33-36 and 43-46 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiyasu (US 5,138,305) in view of Stoddard et al (US 3,665,454).

As to claims 33 and 43, Tomiyasu teaches a computer device associated a method for driving many display devices such as a cathode ray tube (CRT) 16, a liquid crystal display (LCD) 17, an electroluminescent display (ELD) 18, and a plasma display panel (PDP) 19 (raster displays), a device comprising when the signals are all "0", the CRT is selected as show in Fig. 4. When the signals are all "1", the LCD is selected, and when signals FLT and AFT are "1" and signal DSC is "0", the ELD is selected (linking generated code from a formats to a standard library, col. 5, lines 16-19). A selector 24 controls the switching operation of display units in response to the signals display in real time, col. 4, lines 60-66).

Tomiyasu fails to teach a single display routine. However, Stoddard et al teach a single display generator unit (16) (a single display routine, column 1, lines 64-66) driving stroke (writing rates) and raster scan displays, as driving CRT type indicators, the invention is also applicable to any types indicator (column 10, lines 44-51). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the single display routine taught by Stoddard et al in Tomiyasu's display devices because this would save space, room, and light weight for the applicable display device.

As to claims 34 and 44, Tomiyasu teaches font memory, V-RAM 10, as claimed as a graphics library having OpenGL.

As to claims 35 and 45, Tomiyasu teaches when the signals are all "0", the CRT is selected as show in Fig. 4. When the signals are all "1", the LCD is selected, and when signals FLT and AFT are "1" and signal DSC is "0", the ELD is selected (generated code formats, col. 5, lines 16-19).

As to claims 36 and 46, Stoddard et al teach X, Y, Z data register 14-1 and the function generator 16 including stroke displays using memory (figures 2A and 2B, col. 4, lines 70-71).

Response to Arguments

6. Applicant's arguments filed 3/19/2003 have been fully considered but they are not persuasive.

In response to applicant's argument that claims 33, 38, 43, and 48 recites "driving said hybrid, stroke, and raster displays with a single display routine." This argument is not persuasive because Stoddard et al's invention teach "a single display generator unit (16) (a single display routine, column 1, lines 64-66) driving stroke (writing rates) and raster scan displays, as driving CRT type indicators, the invention is also applicable to any types indicator (column 10, lines 44-51)."

For these reasons, the rejections based on Stoddard et al have been maintained.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:


(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Examiner
Art Unit 2674



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600